

**REMARKS**

Applicants respectfully request reconsideration and further examination in view of the following remarks.

**I. Status of the Claims**

With entry of this Amendment, claims 33-41, 69-80, 111-132, 134, 135, and 142-150 are pending in this application. Claims 42, 43, 45, 52-55, 81-85, 88-93, 96-101, 104-110, 133, and 136-141, drawn to non-elected subject matter, have been canceled without prejudice or disclaimer. Applicants reserve the right to pursue that subject matter in a divisional application.

The Office has stated that claims 33-41, 69-80, and 134-135 are allowable. (Office Action mailed September 24, 2004, p. 4.) Claims 111 and 122 have been amended to recite a step of collecting cells from the patient and to recite administering the flt3-L mutant polypeptide "to expand" the hematopoietic stem cells, progenitor cells or both. Support for this amendment can be found throughout the specification, including, for example, at pages 12, 13, and 36-37.

Claims 112 and 123 have also been amended to recite that the cells are transplanted concurrent with or following administering radiation, chemotherapy or both. Support for this amendment can be found throughout the specification, including, for example, at pages 4 and 35-37.

Claims 142-150 have been added. Claim 142 depends from claim 33 and further describes the population of cells to be expanded. Claims 143-145 depend from either claim 111 or 122 and further comprise administering the composition to the patient either after transplanting cells or prior to collecting cells. Claim 146 depends from

claim 122 and recites that the hematopoietic cells are collected from peripheral blood, umbilical cord blood or bone marrow. Claim 147 depends from claim 122 and recites that the cells are CD34<sup>+</sup>. Claims 148 and 149 depend directly or indirectly from claim 39 and further describe the hematopoietic cells. Claim 150 depends from claim 142 and recites that the expanded cell population is introduced into a patient. This mirrors the language of claim 34. Support for claims 142-150 can be found throughout the specification, including, for example, at pages 35-43.

This Amendment does not introduce any new matter.

## **II. Rejections Under 35 U.S.C. § 112, Second Paragraph**

The Office rejects claims 111-132 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter that applicants regard as the invention. (Office Action mailed September 24, 2004, p. 3.) Applicants respectfully disagree.

### **A. Claim 111**

The Office asserts that claim 111 is incomplete for omitting a step. Specifically, the Office asserts that “there is no connection between step (a) [administering flt3-L mutant polypeptide] and step (b) [transplanting cells].” *Id.*

While Applicants believe that one of ordinary skill in the art would understand that a collection step implicitly occurs prior to transplantation, in an effort to expedite prosecution, claim 111 has been amended to add a step of collecting cells prior to transplantation. Thus, what was previously implicit in the claims is now explicit, thereby obviating this rejection.

**B. Claims 112 and 123**

The Office asserts that claims 112 and 123 are indefinite because it is not clear when the administration of radiation and/or chemotherapy occurs during the process or how administering radiation and/or chemotherapy is part of a process of transplanting cells. *Id.* Although Applicants respectfully disagree, in an effort to expedite prosecution, claims 112 and 123 have been amended to recite “wherein said cells are transplanted concurrent with or following administering radiation, chemotherapy or both.” Applicants respectfully request that the Office withdraw this rejection.

**C. Claim 122**

The Office rejects claim 122 alleging that it is unclear whether the hematopoietic cells of part (b) are the same hematopoietic cells in part (a) of claim 122. *Id.* The Office suggested amending “transplanting hematopoietic cells” to read “transplanting *said* hematopoietic cells.” *Id.*

Independent of any pending rejection, claim 122 was amended to add a step of collecting hematopoietic cells and to recite that the composition is administered *ex vivo* to the hematopoietic cells “to expand” the hematopoietic stem cells, progenitor cells or both. In view of this amendment, step (c) was also amended to recite “transplanting said expanded hematopoietic stem cells, progenitor cells or both to the patient,” thereby obviating this rejection.

**CONCLUSION**

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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By: \_\_\_\_\_



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